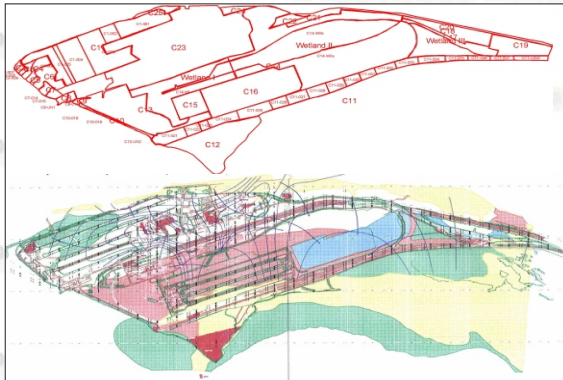




PROJECTS

GIS & Other Projects



GIS3

BHP BILLITON IRON ORE PTY LTD Stormwater run-off models for Nelson Point & Finucane Island

A stormwater run-off model was developed for the Nelson Point ore handling & port facilities, to model sediment and potential contaminant loadings from the site into the harbour area.

Drainage catchments identified by BHPB were underlain by site geology and cut/fill plans to allow run-off coefficients to be allocated.

Evaporative loss was modelled based on published pan Et figures occurring during the storm duration.

Intensity-frequency-duration (IFD) run-off events were also modelled.

The model was calibrated against observed flow data recorded during historic storm events.

A similar run-off model was also developed for the Finucane Island ore handling facility. Run-off catchments were defined from high-resolution aerial photography and a 0.5m digital elevation model. Catchments & discharge points were verified by ground-truthing.

Sediment and contaminant loadings from individual catchments flowing to specific discharge points can be estimated from current and historic rainfall/ intensity events.

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